**IT Applications Unit 3, AOS 2, Organisations and Data Management**

**Database Design Tools, p 106**

**Naming Conventions**

1. List the naming conventions that can be applied to a database.

Some of the key naming conventions that can be applied to a database include;

* Tbl for tables
* While within the tables you may use 3 letters relating to what it stores ie cus if for customer table and hence cusaddress
* Qry for queries
* Frm for forms
* Rpt for reports

**Entity-Relationship Diagram, (ERD)**

1. Describe the nature of these diagrams.

Entity relationship diagrams allow for interrelationships between different data elements to be visually established and represented. This is done by showing subparts of the tables and how the entities relate to each other via symbols similar to that of a flow chart.

1. Draw the symbols used to represent, entities, relationships and attributes.

Is a entity, is a relationship and is a attribute of entity

Ie

name

author

Written by

Book

1. List the three steps to create an ERD.

To create a ERD there are 3 steps to follow

1. Identify the entities
2. Define the relationships
3. Add attributes to each entity

**Data Structure Table**

1. draw a diagram of the data structure table which is used to design a new database.

Are you meaning a diagram from the info in a structure table or the structure table

Note: database tables cannot hold formulas.

**Data Structure diagram**

1. What is the purpose of this diagram?

The key purpose of this diagram is to indicate the relationships that exist between the specific tables of the planned database so that the developers will know how the tables ought to be linked.

**Query Design**

1. what is a query?

A query is action carried out on a completed database to filter out only the records that meet the queries criteria.

1. Distinguish between a primary and a secondary sort

A primary sort is the Main sort that is being used while the secondary sort is the follow up to help make the information more understandable again.

**Layout diagram**

1. What does a layout diagram involve?

A layout diagram involve sketching what an input form or the output such as reports of the solution will look like. For example it would point where headings labels and fields should go as well as other formatting information like font type and styles for the developer to follow. On a similar note it should also point out any formulas to use.

(note follows the formats and conventions appropriate for the situation)

1. List what is contained on a layout diagram.

* Positioning and hence the content to include such as headings, labels, fields ect
* Formatting details such as font type, style, size and options for selection lists
* Any formulas to be added to the form

**Test Data**

1. When is a set of test data prepared?

A set of test data is commonly prepared when design stage for use during development.

1. What is the role of the test data?

The primary role of test data is to ensure that the various parts of a solution are functioning as expected. With this being considered the test data should include data that falls outside of the accepted data as well as the correct data.

**Validating data**

1. List the available electronic validation checks in the software.

Common examples of electronic validation checks available in the software include:

* Checks on accuracy, completeness and reasonability according to normally pre-set information.
* Range checks
* Spelling and grammar checks
* Lists
* Data types
* Input masks
* Alignments
* IIF() statements

1. What is an input mask?

A input mask is used to reduce the chance of invalid data being entered by showing where and what data can be put in a field ie a 9 represents a single digit number that may take its place while a “L” allows for a single digit letter. Ie 9L only allows things like 5A however 99L allows for 07A or 12E ect.